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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/596,287	06/15/2000	Robert D. Kostadina	8788-000004	1374
757	7590	06/22/2004	EXAMINER	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			TO, TUAN C	
			ART UNIT	PAPER NUMBER
			3663	

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/596,287

Applicant(s)

KOSTADINA, ROBERT D.

Examiner

Tuan C To

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-16,19-22 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7,9-11 and 22 is/are allowed.
- 6) ☒ Claim(s) 12,14-16,19 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 20,21,28 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 15 recites the limitation "said weather signal affects said determination of said characteristic" in claim 12. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 14, 16, 19, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiwatashi (US 6094614A) and in view of LeFebvre et al. (U.S. 5612882).

Claims 12 and 16: The primary reference to Hiwatashi has been cited as basically disclosing the vehicle control system as claimed, including a plurality of

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control such systems such as an anti-lock brake system, a traction control system, and a stability system. In Hiwatashi's, the control unit 90 (Figure 1) is also disclosed as associated with mentioned systems. Furthermore, Hiwatashi teaches a road coefficient estimating means for estimating a road friction coefficient. It is noted that the control unit 90 is coupled to all sub-systems mentioned above to produce a control signal in response to the input signal from the coefficient estimating means.

Hiwatashi does not disclose the following: a database of various roads, including data on road surface type, and a controller adapted to receive a vehicle position signal and a weather signal indicative of a proximate weather condition; and to produce a control signal in response thereto, the controller determining the road surface type associated with the vehicle position and further determining a road surface condition based on the road surface type and the proximate weather condition; the control signal indicative of the road surface type and the road surface condition.

The secondary to LeFebvre et al. is provided as disclosing the missing features from Hiwatashi. LeFebvre et al disclose a vehicle control system, in which the navigation guidance and a road network database (12) of various roads are taught. The road network database (12) as said also comprises road type and the road surface profiles (normal or weather) are available for selecting. Referring to figure 2 of LeFebvre et al, the computer (22) is coupled to various sensors such as direction, distance position sensors (14), environment sensors (15), and the road network database (12). The basic function performed by the

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computer (22) is similar to the controller recited in the claim. It is noted the computer (12) determines the position of the vehicle via the position sensor (LeFebvre et al., abstract), and determines the road surface type, road surface condition based on the outside condition weather, and also based on the operator's selection between normal network profile and weather network profile (LeFebvre et al, column 3, lines 34-51 ; and Table 3 represented in column 10)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Hiwatashi to include the teachings of LeFebvre et al. in order to perfectly guide one user to a specified destination with a special caution when the vehicle is traveling on a wet road or on a road under construction.

With regard to claim 14, LeFebvre et al. discloses that the vehicle position signal is received via GPS receiver (LeFebvre et al., column 2, lines 57-65).

With regard to claim 19, Hiwatashi discloses that the control apparatus (90) receives the input signals from the wheel speed sensors (29fl, 29fr, 29rl, 29rr).

With regard to claim 24, LeFebvre et al. discloses that weather signal includes information from a plurality of sensors coupled to the vehicle (LeFebvre et al., column 3, lines 4-22).

With regard to claim 25, LeFebvre et al. teach that one user is able to select one of the two network profiles-normal or weather.

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With regard to claim 26, LeFebvre et al discloses the step of inputting a weather signal includes receiving a broadcast radio transmission indicative of proximate weather conditions (LeFebvre et al, column 3, lines 45-52).

With regard to claim 27, LeFebvre et al. discloses that weather signal includes information from a plurality of sensors coupled to the vehicle (LeFebvre et al., column 3, lines 4-22).

Allowable Subject Matter

As the allowable subject matter has been indicated in the previous office action, claim 1 is now allowable as well as claims 2-7, 9-11, and 22.

The prior art searching has been updated, however, none of the references teaches or discloses the limitations as recited in claims 20, 21, 28 and 29, thus, they are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8, 13, 17, 18, and 23 have been cancelled by the applicant.

Response to Amendment

In response to the applicant's amendment and argument filed on 03/22/2004, the examiner has withdrawn the reference to Matsuno except for the reference to Hiwatashi because Hiwatashi reference still reads on some limitations as recited in the claims. The new reference to LeFebvre et al. has been found that overcome the missing features from Hiwatashi. The combination of Hiwatashi and LeFebvre et al. would address all the features recited in the

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claims. For the reason discussed in the previous paragraphs, the present application would not be patentable over the cited prior art.

Conclusions

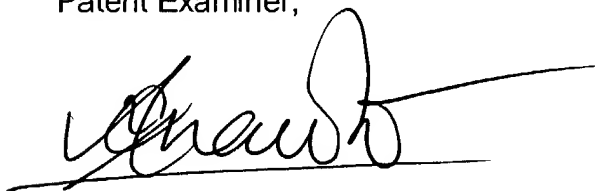
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (703) 308-6273. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner,

A handwritten signature in black ink, appearing to read 'Tuan C To', with a long horizontal line extending to the right.

Tuan C To

Date: June 13, 2004